

National Imaging Associates, Inc.*	
Clinical guidelines: ABDOMINAL ARTERIES CTA (Angiography)	Original Date: July 2008
CPT Codes: 75635	Last Revised Date: April 202 2 ¹
Guideline Number: NIA_CG_035	Implementation Date: January 202 3 ²

IMPORTANT NOTE

Only one authorization request is required, using CPT Code 75635 Abdominal Arteries CTA with run-off. This study provides for imaging of the abdomen, pelvis, and both legs and is the noninvasive equivalent to an “aortogram and run-off”.

INDICATIONS FOR ABDOMINAL ARTERIES CTA with run-off

For evaluation of a vascular abnormality in the abdominal aorta and lower extremities

For evaluation of known or suspected abdominal, pelvic, or peripheral vascular disease¹⁻⁴
~~(ACR, 2016; Ahmed, 2017, Conte, 2015, Wernecke, 2015)~~

- For known or suspected peripheral arterial disease (such as claudication, or clinical concern for vascular causes of ulcers) when non-invasive studies (pulse volume recording, ankle-brachial index, toe brachial index, segmental pressures, or doppler ultrasound) are abnormal or equivocal
- For critical limb ischemia with **ANY** of the below clinical signs of peripheral artery disease. Ultrasound imaging is **not** needed. If done and negative, it should still be approved due to a high false negative rate^{5, 6} ~~(Shishehbor, 2016; Weiss, 2018)~~
 - Ischemic rest pain
 - Tissue loss
 - Gangrene

Pre-operative evaluation

- Evaluation of interventional vascular procedures for luminal patency versus restenosis due to conditions such as atherosclerosis, thromboembolism, and intimal hyperplasia

Post-operative or post-procedural evaluation

- Evaluation of post-operative complications, e.g., pseudoaneurysms related to surgical bypass grafts, vascular stents, and stent-grafts

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1—Abdominal Arteries CTA

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- Follow-up study may be needed to help evaluate a patient's progress after treatment, procedure, intervention, or surgery. Documentation requires a medical reason that clearly indicates why additional imaging is needed for the type and area(s) requested.
- After stenting or surgery with signs of recurrent symptoms OR abnormal ankle/brachial index; abnormal or indeterminate arterial doppler; OR pulse volume recording⁷ ~~(Pollak, 2012)~~
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BACKGROUND

High resolution computed tomography angiography (CTA) provides a cost-effective and accurate imaging assessment in the diagnosis and follow-up of patients with aortic dissections or peripheral arterial disease (PAD).

OVERVIEW

Suspected Peripheral Arterial Disease – CTA (or MRA) is an excellent tool to diagnose lower extremity peripheral arterial disease (PAD). Benefits include the fast scanning time and accurate detection of occlusions and stenosis. According to the Society for Vascular Surgery guidelines ~~(Conte, 2015)~~, "Measurement of the ankle-brachial index (ABI) is the primary method for establishing the diagnosis of PAD. An ABI of ≤ 0.90 has been demonstrated to have high sensitivity and specificity for the identification of PAD compared with the gold standard of invasive arteriography."² The presence of a normal ABI at rest and following exercise almost excludes atherosclerotic disease as a cause for leg claudication ~~(Ahmed, 2017; Stoner, 2016)~~.^{1, 8}

When an ABI is >1.40 ~~(suggesting noncompressible calcified vessels)~~ and clinical suspicion is high, other tests such as toe-brachial index <8 , a resting toe pressure <40 mm Hg, a systolic peak posterior tibial artery flow velocity <10 cm/s may be used. "In symptomatic patients in whom revascularization treatment is being considered, we recommend anatomic imaging studies, such as arterial duplex ultrasound, CTA, MRA, and contrast arteriography ~~(Conte, 2015)~~."² This later statement is accompanied by a "B" (moderate) rating for the accompanying evidence ("A" = high, "C" = low) "In patients with limited renal function or planned surgical intervention, noninvasive imaging tests (particularly MRA and CTA) may obviate the need for diagnostic catheter angiography to visualize the location and severity of peripheral vascular disease ~~(Ahmed, 2017)~~."¹

Follow-up imaging post vascular surgery procedures have not been well researched without clear surveillance protocols in place. Clinical exam, ABI and EUS within the first month of endovascular therapy are generally recommended to assess for residual stenosis, and again at 6 and 12 months, then annually. More sophisticated imaging with CTA, MRA, or invasive catheter angiography is reserved for complex cases ~~(Zierler, 2018)~~.⁹

POLICY HISTORY

Date	Summary
<u>April 2022</u>	<u>No substantive changes</u>
April 2021	No substantive changes
May 2020	<ul style="list-style-type: none">• Improved by making more similar to LE CTA guidelines• Added info regarding critical limb ischemia and clinical concern for vascular cause of ulcers after prior abnormal testing
May 2019	<ul style="list-style-type: none">• Added indication for evaluation of an organ or abnormality seen on previous imaging• Removed indication for ischemia related to presence of ulcer, gangrene, or claudication• Added/modified Background information and updated references

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GENERAL INFORMATION

~~It is an expectation that all patients receive care/services from a licensed clinician. All appropriate supporting documentation, including recent pertinent office visit notes, laboratory data, and results of any special testing must be provided. If applicable: All prior relevant imaging results and the reason that alternative imaging cannot be performed must be included in the documentation submitted.~~

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ADDITIONAL RESOURCES

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